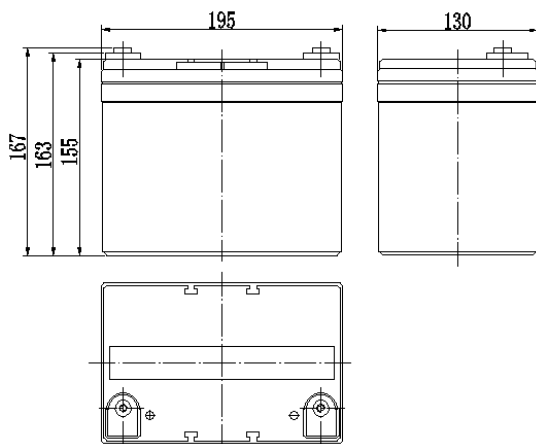


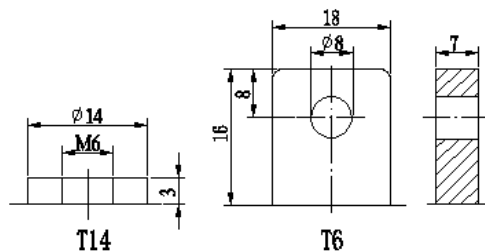
Specifications

Nominal Voltage		12 V
Rated capacity(10HR)		33Ah
Dimension	Length	195 ± 2mm (7.68inch)
	Width	130 ± 2mm (5.12inch)
	Height	155 ± 2mm (6.10inch)
	Total Height	T14: 167 ± 2mm (6.57inch) T6: 180 ± 2mm (7.09inch)
Approx. Weight		10kg (22.0lbs) ± 4%

Dimensions



Terminal



Characteristics

Capacity (25°C)	10HR(10.8V)	33 Ah
	3HR(10.8V)	24Ah
	1HR(10.5V)	19Ah
Terminal type		T14/T6
Internal resistance (Fully charged, 25°C)		Approx. 11m Ω
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25°C ± 3°C (77°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	-10°C ~ 50°C (14°F ~ 122°F)
	Storage	-20°C ~ 50°C (-4°F ~ 122°F)
Float charging voltage(25°C)	13.50 to 13.80V Temperature compensation: -18mV/°C	
Cyclic charging voltage(25°C)	14.50 to 15.00V Temperature compensation: -30mV/°C	
Maximum charging current	9.9A	
Terminal material	Copper/Lead	
Maximum discharge current	330A(5 sec.)	
Designed floating life(20°C)	10 years	

Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper/Lead

Constant Current Discharge Characteristics (A, 25°C)

F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	71.9	55.4	33.2	20.4	12.1	8.68	6.93	5.92	4.07	3.36	1.78
9.90V	69.8	54.1	32.5	20.1	12.0	8.63	6.89	5.89	4.05	3.35	1.78
10.2V	66.9	52.1	31.5	19.6	11.9	8.57	6.85	5.85	4.02	3.34	1.77
10.5V	64.0	50.3	30.7	19.0	11.7	8.51	6.80	5.81	3.99	3.32	1.76
10.8V	60.4	47.7	29.6	18.4	11.4	8.26	6.59	5.63	3.87	3.30	1.75

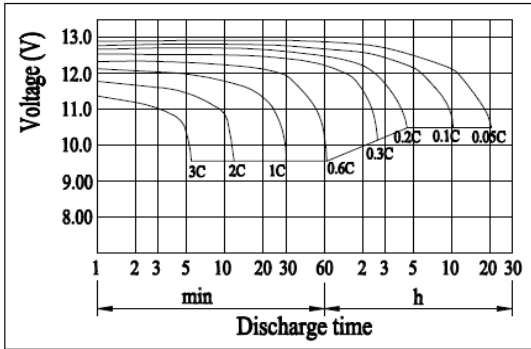
Constant Power Discharge Characteristics (Watt, 25°C)

F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	777	609	372	232	140	102	81.5	70.0	48.4	40.1	21.4
9.90V	754	594	365	229	139	102	81.1	69.6	48.1	40.0	21.3
10.2V	723	572	354	223	138	101	80.5	69.1	47.8	39.9	21.3
10.5V	691	553	345	216	136	100	79.9	68.7	47.4	39.7	21.1
10.8V	653	524	332	209	132	97.1	77.5	66.6	46.0	39.4	21.0

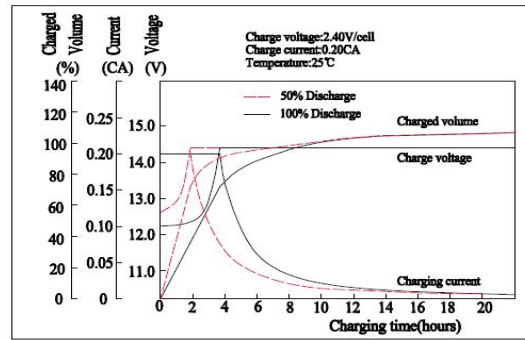
Note: The above characteristics data can be obtained within three charge/discharge cycles.

Sealed Lead-Acid Batteries

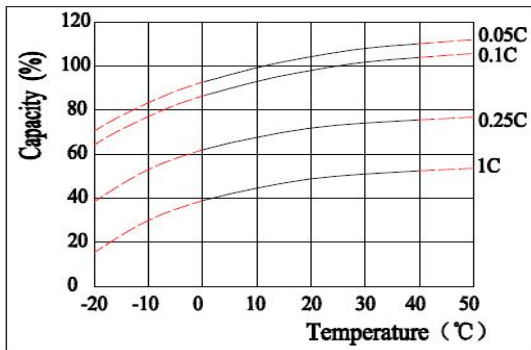
Discharge Characteristics(25°C)



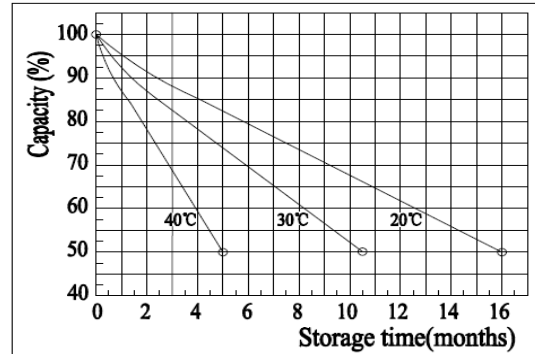
Charging Characteristics(25°C)



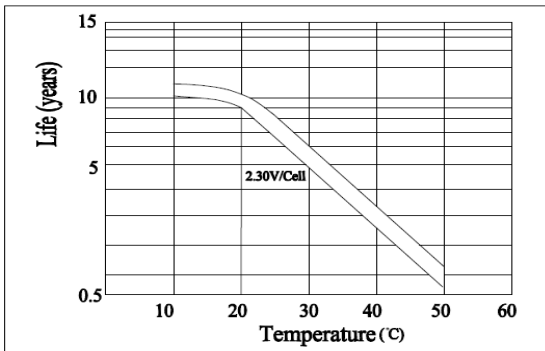
Effect of Temperature on Capacity



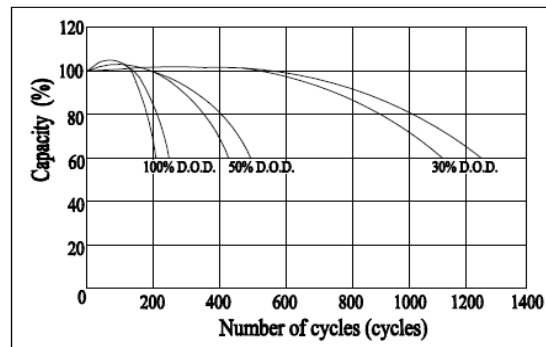
Self-discharge Characteristics



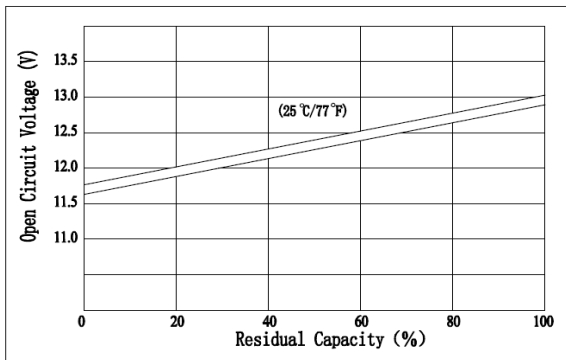
Floating Life on Temperature



Cycle Life on D.O.D(25°C)



The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature

